

ON THE TREATMENT OF EARLY FORMS OF SYPHILIS*†

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Great achievements have been made in the control of syphilis in the first half of this century and their significance cannot be overestimated. Nowadays hardly anyone will doubt the curative power of penicillin as a remedy against syphilis. However, the time that has elapsed since penicillin was introduced into medical practice is so short that we are not justified in coming to any final conclusions regarding its beneficial results in syphilis, which can easily be treated with Salvarsan. Even now, scientists working on the control of syphilis are not certain whether it is better to use long-acting preparations of penicillin or water solutions of the drug. Debates are under way as to the advisability of one-stage or continuous doses of various compounds of penicillin. Some insist that it should be used alone; others think that it is better to administer it in combination with other anti-syphilitic preparations, *i.e.* Salvarsan, bismuth, and mercury.

In 1952 we analysed the results of our 4-year observations on 184 cases of syphilis which were treated with 3,400,000 units penicillin alone. Among primary sero-negative cases, there were 3.7 per cent. of relapses, 5.5 per cent. among primary sero-positive cases, 18.6 per cent. among cases of secondary fresh syphilis, and 34.8 per cent. among cases of secondary recidive syphilis (average 15.6 per cent.).

In 1953, we analysed the results of treatment given to 162 patients suffering from various types of syphilis, mostly early, who had been under observation since 1948. The treatment consisted of one course of penicillin in a dose of 3,400,000 units plus one to two courses of novarsenol and bismuth. In this group there were no relapses among primary sero-negative cases; among primary sero-positive cases 6 per cent. had relapses, among cases of secondary fresh syphilis about 12 per cent., and in cases of secondary recidive syphilis about 30 per cent. (average figure

11.7 per cent.). These data show that the combination of Salvarsan and bismuth with penicillin gave better results, and consequently a number of specialists favour the combination of penicillin with bismuth, mercury, and Salvarsan and also with fever therapy. In works published in 1955, some investigators insisted that the treatment of syphilis should be conducted by means of various long-acting preparations of penicillin alone, and some subscribed to the opinion that the combined treatment is superior.

In the Soviet Union two long-acting preparations of penicillin, Novocillin and Ecmonovocillin, have been tried experimentally and clinically. The high efficiency of these two preparations of penicillin was proved by Ovčinnikov, Kutukova, and Korbut (1953), Smelov and Krynova (1953), and Rozentul, Sokolin, Vasil'ev, and ten others (1955). These preparations are administered in doses of 300,000 units twice in 24 hours and 600,000 in 24 hours. At present we use Bicillin, and recently penicillin pyrotherapy, together with other methods of combined treatment, has been widely employed.

Studnicin (1954) investigated a large group of patients suffering from early syphilis, and found that in 7.2 per cent. treatment was of no avail, and that with penicillin alone failures occurred in 14 per cent. of the cases. Because relapses were observed, especially in secondary recidive syphilis, the majority of Soviet syphilologists now insist on the combined penicillin-Novarseno-bismuth therapy in cases where there are no contraindications to the use of Salvarsan, bismuth, or mercury.

Very different results were obtained when we used intermittent courses of treatment with Novarsenol, bismuth, and mercury. Sokolin (1950) investigated the late results of treatment in 344 cases of primary, secondary, and recidive syphilis. Relapses were found in 9 per cent. of all cases examined 10 years after the end of specific treatment.

However, the results given above cannot satisfy those who are always searching for new ways and means of perfecting anti-syphilis therapy. For more

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than 10 years Soviet syphilologists have been using combined treatment in syphilis cases (penicillin, Novarsenol, bismuth, or mercury and, in cases when it is indicated, iodine alkalines). This treatment has been given in two ways: first, penicillin plus combined treatment; and secondly, penicillin followed 7 to 10 days later by conventional combined treatment. Preliminary results reported by Rozentul, Vasil'ev, Sokolin, and ten others (1955) showed that, of 167 cases of various types of the disease treated by the first method, failures occurred in 3 per cent., while of 93 patients suffering from secondary recidive syphilis, relapses were noted in only two cases. Out of 114 patients who received the second method of treatment, only one relapse occurred. However, our observations of this second group of patients are as yet incomplete. The data quoted here, together with communications by other syphilologists, led the scientific commission of the Ministry of Health of the U.S.S.R. to recommend in December, 1953, the combined penicillin-Novarsenol-bismuth (or mercury) therapy in cases of early syphilis if there were no contraindications.

The main principles of this type of treatment are:

- (1) Individual approach;
- (2) Intermittent courses of treatment;
- (3) Treatment beginning with penicillin, when soluble as well as long-acting preparations are used;
- (4) Penicillin followed by Novarsenol-bismuth (or mercury). The number of added combined courses

of treatment (from 1 to 5) depends on the diagnosis of the disease and its clinical course during treatment;

- (5) Supplementary fever therapy, especially in cases of resistant syphilis. Spa treatment in such resistant cases is highly indicated.

It is believed that, whatever method of specific treatment is used, very much depends on the individual regimen of the patients. By this we mean sufficient sleep, fresh air, exercise, good nutrition, and systematic polyvitamin therapy, vitamins C and B₁ being of greatest importance.

That considerable success has been achieved in the control of syphilis cannot be doubted. However, we are still facing a number of difficulties and unsolved problems, including the role of antibiotics in the therapy of syphilis.

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